



59131.ST25

SEQUENCE LISTING

<110> Sato, Taki-Aki

<120> GENE ENCODING NADE, P75NTR- ASSOCIATED CELL DEATH
EXECUTOR AND USES THEREOF

<130> 0575/59131/JPW/APE

<140> 09/327,750

<141> 1999-06-07

<160> 45

<170> PatentIn version 3.0

<210> 1

<211> 36

<212> DNA

<213> MOUSE

<400> 1
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36

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<213> MOUSE

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Asn Cys Leu Arg Ile Leu Met Gly Glu Leu Ser Asn
1 5 10

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<213> Artificial Sequence

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<221> misc_feature

<222> (1)..(30)

<223> Mouse Nade DNA

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<222> (1)..(28)

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ccgctcgagt cttgtacagc tcgtccat

28

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 atcctcgagc gatcatggcc aatgtccac

29

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 atcggatcct ctcagctgta gctccct

27

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<222> (1)..(26)
<223> Mouse Nade DNA

<400> 10
atccggagaa aggctaggga ggcaca

26

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<222> (1)..(26)
<223> Mouse Nade DNA

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tgtgcctccc tagcctttct ccggat

26

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<211> 124
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<213> MOUSE

<400> 12
Met Ala Asn Val His Gln Glu Asn Glu Glu Met Glu Gln Pro Leu Gln
1 5 10 15
Asn Gly Glu Glu Asp Arg Pro Val Gly Gly Gly Glu Gly His Gln Pro
20 25 30
Ala Gly Asn Asn Asn Asn Asn Asn His Asn His Asn His Asn His His
35 40 45
Arg Arg Gly Gln Ala Arg Arg Leu Ala Pro Asn Phe Arg Trp Ala Ile
50 55 60
Pro Asn Arg Gln Met Asn Asp Gly Leu Gly Gly Asp Gly Asp Asp Met
65 70 75 80
Glu Met Phe Met Glu Glu Met Arg Glu Ile Arg Arg Lys Leu Arg Glu
85 90 95
Leu Gln Leu Arg Asn Cys Leu Arg Ile Leu Met Gly Glu Leu Ser Asn
100 105 110
His His Asp His His Asp Glu Phe Cys Leu Met Pro
115 120

<210> 13
 <211> 111
 <212> PRT
 <213> HUMAN

<400> 13

Met Ala Asn Ile His Gln Glu Asn Glu Glu Met Glu Gln Pro Met Gln
 1 5 10 15
 Asn Gly Glu Glu Asp Arg Pro Leu Gly Gly Gly Glu Gly His Gln Pro
 20 25 30
 Ala Gly Asn Arg Arg Gly Gln Ala Arg Arg Leu Ala Pro Asn Phe Arg
 35 40 45
 Trp Ala Ile Pro Asn Arg Gln Ile Asn Asp Gly Met Gly Gly Asp Gly
 50 55 60
 Asp Asp Met Glu Ile Phe Met Glu Glu Met Arg Glu Ile Arg Arg Lys
 65 70 75 80
 Leu Arg Glu Leu Gln Leu Arg Asn Cys Leu Arg Ile Leu Met Gly Glu
 85 90 95
 Leu Ser Asn His His Asp His His Asp Glu Phe Cys Leu Met Pro
 100 105 110

<210> 14
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 <213> czyxin

<400> 14

Leu Thr Met Lys Glu Val Glu Glu Leu Glu Leu Leu Thr
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<210> 15
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 <212> PRT
 <213> MAPKK

<400> 15

Ala Leu Gln Lys Lys Leu Glu Glu Leu Glu Leu Asp Glu
 1 5 10

<210> 16
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 <212> PRT
 <213> PKI-alpha

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Leu Ala Leu Lys Leu Ala Gly Leu Asp Ile
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<210> 17
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 <212> PRT
 <213> TF III A

<400> 17

Leu Pro Val Leu Glu Asn Leu Thr Leu
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<210> 18
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<212> PRT
<213> Rev HIV-1

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Leu Pro Pro Leu Glu Arg Leu Thr Leu
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<210> 19
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Lys Val Ala Glu Lys Leu Glu Ala Leu Ser Val Arg
1 5 10

<210> 20
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<213> FMRP

<400> 20

Glu Val Asp Gln Leu Arg Leu Glu Arg Leu Gln Ile Asp
1 5 10

<210> 21
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<213> Gle 1

<400> 21

Leu Pro Leu Gly Lys Leu Thr Leu
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<210> 22
<211> 14
<212> PRT
<213> Rex HTLV-1

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Ala Leu Ser Ala Gln Leu Tyr Ser Ser Leu Ser Leu Asp Ser
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<210> 23
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<213> human NADE

<400> 23

Arg Glu Ile Arg Arg Lys Leu Arg Glu Leu Gln Leu Arg
1 5 10

<210> 24
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<212> PRT
 <213> mouse NADE

<400> 24

Arg Glu Ile Arg Arg Lys Leu Arg Glu Leu Gln Leu Arg
 1 5 10

<210> 25
 <211> 27
 <212> PRT
 <213> MOUSE

<400> 25

Arg Glu Ile Arg Arg Lys Leu Arg Glu Leu Gln Leu Arg Asn Cys Leu
 1 5 10 15

Arg Ile Leu Met Gly Glu Leu Ser Asn His His
 20 25

<210> 26
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 <212> PRT
 <213> HUMAN

<400> 26

Arg Glu Ile Arg Arg Lys Leu Arg Glu Leu Gln Leu Arg Asn Cys Leu
 1 5 10 15

Arg Ile Leu Met Gly Glu Leu Ser Asn His His
 20 25

<210> 27
 <211> 8
 <212> PRT
 <213> CONSENSUS (MOUSE v. HUMAN)

<400> 27

Arg Leu Leu Asn Arg Leu Leu Asn
 1 5

<210> 28
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<400> 28
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 aggcgagcgg gacagattga ctggaagccg agagtccagg cggcagcggg aattgacagg 120
 aggactacgc cgcaagggat aggcccagaa tagcaaccag gaaacaaaat ctcacatcagg 180
 ccaatgtcca ccaggaaaac gaagagctgg agcagcccct gcagaatgga caggaaacacc 240
 gccctgtggg aggaggtgag ggccaccagc ctgctgcaaa caacaacaac aacaaccaca 300
 accataacca caaccaccac cgaagaggcc aggctcgccg acctgcccct aacttccgat 360
 gggccattcc caacaggcag atgaatgacg gggtgggtgg agatggagat gatatggaaa 420
 tgttcatgga ggagatgaga gagatccgga gaaagcttag ggagctacag ctgagaaatt 480

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gtctacgcat ctttatgggg gagctgtcta accaccacga tcacccatgat gaattctgcc 540
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tttccctcgc attttcttga catgccttta atgacccgtt tgtggtgagc cctgtgttat 660
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<210> 29
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<212> DNA
<213> HUMAN

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gggaggggct ttaattggag gccccgtaga ggacgcgcgg aacttctaag gtgggaaaaa 180
acgaaattaa aaaatccttt gatatcaggg ctctgaatcc tgctggtcag agcaccaagc 240
attcagtctc tctccttgcc ttgtctttac ttgtgttcaa agaaaaacaa ccagaaaaaa 300
aaaatctcat catggcaaat attcaccagg aaacgaaga gatggagcag cctatgcaga 360
atggagagga agaccgccct ttgggaggag gtgaaggcca ccagcctgca ggaaatcgac 420
ggggacaggc tcgccgactt gcccctaatt ttcgatgggc catacccaat aggcagatca 480
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tcagaagaaa acttagggag ctgcagttga ggaattgtct gcgtatcctt atggggggagc 600
tctctaatac ccatgaccat catgatgaat ttgccttat gccttgactc ctgccattta 660
tcatgagatt aatactgtga ttcccgctgt tttctttttc cttgcatttt cctaatatgc 720
ctttactgat ccgtttgctg tgaaccctat gttatttcca tgtgtcaagt ggggtcttgtg 780
ttgccagctt ctatttgaag attgccttgc cactcagtgt aagtttctgt cagcagtagt 840
ttcacccatt tgcattggaaa aatttaaagc caataaagca atttaaaaag c 891

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<210> 30
<211> 128
<212> PRT
<213> NADE 3a

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<400> 30

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Met Glu Ser Lys Asp Gln Gly Val Lys Asn Leu Asn Met Glu Asn Asp
1          5          10          15
His Gln Lys Lys Glu Glu Lys Glu Glu Lys Pro Gln Asp Thr Ile Arg
20        25        30
Arg Glu Pro Ala Val Ala Leu Ile Ser Glu Ala Gly Lys Asn Cys Ala
35        40        45
Pro Arg Gly Gly Arg Arg Arg Phe Arg Val Arg Gln Pro Ile Ala His
50        55        60

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Tyr Arg Trp Asp Leu Met Gln Arg Val Gly Glu Pro Gln Gly Arg Met
 65 70 75 80
 Arg Glu Glu Asn Val Gln Arg Phe Gly Gly Asp Val Arg Gln Leu Met
 85 90 95
 Glu Lys Leu Arg Glu Arg Gln Leu Ser His Ser Leu Arg Ala Val Ser
 100 105 110
 Thr Asp Pro Pro His His Asp His His Asp Glu Phe Cys Leu Met Pro
 115 120 125

<210> 31
 <211> 128
 <212> PRT
 <213> NANE 3a1

<400> 31

Met Glu Ser Lys Glu Glu Arg Ala Leu Asn Asn Leu Ile Val Glu Asn
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 Val Asn Gln Glu Asn Asp Glu Lys Asp Glu Lys Glu Gln Val Ala Asn
 20 25 30
 Lys Gly Glu Pro Leu Ala Leu Pro Leu Asn Val Ser Glu Tyr Cys Val
 35 40 45
 Pro Arg Gly Asn Arg Arg Arg Phe Arg Val Arg Gln Pro Ile Leu Gln
 50 55 60
 Tyr Arg Trp Asp Ile Met His Arg Leu Gly Glu Pro Gln Ala Arg Met
 65 70 75 80
 Arg Glu Glu Asn Met Glu Arg Ile Gly Glu Glu Val Arg Gln Leu Met
 85 90 95
 Glu Lys Leu Arg Glu Lys Gln Leu Ser His Ser Leu Arg Ala Val Ser
 100 105 110
 Thr Asp Pro Pro His His Asp His His Asp Glu Phe Cys Leu Met Pro
 115 120 125

<210> 32
 <211> 125
 <212> PRT
 <213> NADE 3a2

<400> 32

Met Glu Ser Lys Glu Lys Arg Ala Val Asn Ser Leu Ser Met Glu Asn
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 Ala Asn Gln Glu Asn Glu Glu Lys Glu Gln Val Ala Asn Lys Gly Glu
 20 25 30
 Pro Leu Ala Leu Pro Leu Asp Ala Gly Glu Tyr Cys Val Pro Arg Gly
 35 40 45
 Asn Arg Arg Arg Phe Pro Val Arg Gln Pro Ile Leu Gln Tyr Arg Trp
 50 55 60
 Asp Ile Met His Arg Leu Gly Glu Pro Gln Ala Arg Met Arg Glu Glu
 65 70 75 80

Asn Met Glu Arg Ile Gly Glu Glu Val Arg Gln Leu Met Glu Lys Leu
85 90 95

Arg Glu Lys Gln Leu Ser His Ser Leu Arg Ala Val Ser Thr Asp Pro
100 105 110

Pro His His Asp His His Asp Glu Phe Cys Leu Met Pro
115 120 125

<210> 33

<211> 128

<212> PRT

<213> RAT

<400> 33

Met Glu Ser Lys Asp Gln Gly Ala Lys Asn Leu Asn Met Glu Asn Asp
1 5 10 15

His Gln Lys Lys Glu Glu Lys Glu Glu Lys Pro Gln Asp Thr Ile Lys
20 25 30

Arg Glu Pro Val Val Ala Pro Thr Phe Glu Ala Gly Lys Asn Cys Ala
35 40 45

Pro Arg Gly Gly Arg Arg Arg Phe Arg Val Arg Gln Pro Ile Ser His
50 55 60

Tyr Arg Trp Asp Leu Met His Arg Val Gly Glu Pro Gln Gly Arg Met
65 70 75 80

Arg Glu Glu Asn Val Gln Arg Phe Gly Glu Asp Met Arg Gln Leu Met
85 90 95

Glu Lys Leu Arg Glu Arg Gln Leu Ser His Ser Leu Arg Ala Val Ser
100 105 110

Thr Asp Pro Pro His His Asp His His Asp Glu Phe Cys Leu Met Pro
115 120 125

<210> 34

<211> 118

<212> PRT

<213> NADE 3b

<400> 34

Met Ala Ser Lys Val Lys Gln Val Ile Leu Asp Leu Thr Val Glu Lys
1 5 10 15

Asp Lys Lys Asn Lys Lys Gly Gly Lys Ala Ser Lys Gln Ser Glu Glu
20 25 30

Glu Ser His His Leu Glu Glu Val Glu Asn Lys Lys Pro Gly Gly Asn
35 40 45

Val Arg Arg Lys Val Arg Arg Leu Val Pro Asn Phe Leu Trp Ala Ile
50 55 60

Pro Asn Arg His Val Asp His Ser Glu Gly Gly Glu Glu Val Gly Arg
65 70 75 80

Phe Val Gly Gln Val Met Glu Ala Lys Arg His Ser Lys Glu Gln Gln
85 90 95

Met Arg Pro Tyr Thr Arg Phe Arg Thr Pro Glu Pro Asp Asn His Tyr
 100 105 110

Asp Phe Cys Leu Ile Pro
 115

<210> 35
 <211> 117
 <212> PRT
 <213> NADE 3b

<400> 35

Met Ala Ser Lys Lys Gln Val Ile Leu Asp Leu Thr Val Glu Lys Asp
 1 5 10 15

Lys Lys Asp Lys Arg Gly Gly Lys Ala Ser Lys Gln Ser Glu Glu Glu
 20 25 30

Pro His His Leu Glu Glu Val Glu Asn Lys Lys Pro Gly Gly Asn Val
 35 40 45

Arg Arg Lys Val Arg Arg Leu Val Pro Asn Phe Leu Trp Ala Ile Pro
 50 55 60

Asn Arg His Val Asp Arg Asn Glu Gly Gly Glu Asp Val Gly Arg Phe
 65 70 75 80

Val Val Gln Gly Thr Glu Val Lys Arg Lys Thr Thr Glu Gln Gln Val
 85 90 95

Arg Pro Tyr Arg Arg Phe Arg Thr Pro Glu Pro Asp Asn His Tyr Asp
 100 105 110

Phe Cys Leu Ile Pro
 115

<210> 36
 <211> 110
 <212> PRT
 <213> NADE 1

<400> 36

Met Ala Asn Ile His Gln Glu Asn Glu Glu Met Glu Gln Pro Met Gln
 1 5 10 15

Asn Gly Glu Glu Asp Arg Pro Leu Gly Gly Gly Glu Gly His Gln Pro
 20 25 30

Ala Gly Asn Arg Arg Gln Ala Arg Arg Leu Ala Pro Asn Phe Arg Trp
 35 40 45

Ala Ile Pro Asn Arg Gln Ile Asn Asp Gly Met Gly Gly Asp Gly Asp
 50 55 60

Asp Met Glu Ile Phe Met Glu Glu Met Arg Glu Ile Arg Arg Lys Leu
 65 70 75 80

Arg Glu Leu Gln Leu Arg Asn Cys Leu Arg Ile Leu Met Gly Glu Leu
 85 90 95

Ser Asn His His Asp His His Asp Glu Phe Cys Leu Met Pro
 100 105 110

<210> 37
 <211> 120
 <212> PRT
 <213> NADE 1

<400> 37

Met Glu Gln Pro Leu Gln Asn Gly Gln Glu Asp Arg Pro Val Gly Gly
 1 5 10 15
 Gly Glu Gly His Gln Pro Ala Ala Ala Asn Asn Asn Asn His Asn His
 20 25 30
 Asn His His Asn His Ser His Asn His Asn His His Arg Arg Gly Gln
 35 40 45
 Ala Arg Arg Leu Ala Pro Asn Phe Arg Trp Ala Ile Arg Asn Arg Gln
 50 55 60
 Met Asn Asp Gly Leu Gly Gly Asp Gly Asp Asp Met Glu Met Phe Met
 65 70 75 80
 Glu Glu Met Arg Glu Ile Arg Arg Lys Leu Arg Glu Leu Gln Leu Arg
 85 90 95
 Asn Cys Leu Arg Ile Leu Met Gly Glu Leu Ser Asn His His Asp His
 100 105 110
 His Asp Glu Phe Cys Leu Met Pro
 115 120

<210> 38
 <211> 122
 <212> PRT
 <213> NADE 1

<400> 38

Met Ala Asn Val His Gln Glu Asn Glu Glu Met Glu Gln Pro Leu Gln
 1 5 10 15
 Asn Gly Gln Glu Asp Arg Pro Val Gly Gly Gly Glu Gly His Gln Pro
 20 25 30
 Ala Ala Asn Asn Asn Asn Asn Asn His Asn His Asn His His Arg Arg
 35 40 45
 Gly Gln Ala Arg Arg Leu Ala Pro Asn Phe Arg Trp Ala Ile Pro Asn
 50 55 60
 Arg Gln Met Asn Asp Gly Leu Gly Gly Asp Gly Asp Asp Met Glu Met
 65 70 75 80
 Phe Met Glu Glu Met Arg Glu Ile Arg Arg Lys Leu Arg Glu Leu Gln
 85 90 95
 Leu Arg Asn Cys Leu Arg Ile Leu Met Gly Glu Leu Ser Asn His His
 100 105 110
 Asp His His Asp Glu Phe Cys Leu Met Pro
 115 120

<210> 39
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<212> PRT
 <213> NADE 2

<400> 39

Met Glu Asn Val Pro Lys Glu Asn Lys Val Val Glu Lys Ala Pro Val
 1 5 10 15
 Gln Asn Glu Ala Pro Ala Leu Gly Gly Gly Glu Tyr Gln Glu Pro Gly
 20 25 30
 Gly Asn Val Lys Gly Val Trp Ala Pro Pro Ala Pro Gly Phe Gly Glu
 35 40 45
 Asp Val Pro Asn Arg Leu Val Asp Asn Ile Asp Met Ile Asp Gly Asp
 50 55 60
 Gly Asp Asp Met Glu Arg Phe Met Glu Glu Met Arg Glu Leu Arg Arg
 65 70 75 80
 Lys Ile Arg Glu Leu Gln Leu Arg Tyr Ser Leu Arg Ile Leu Ile Gly
 85 90 95
 Asp Pro Pro His His Asp His His Asp Glu Phe Cys Leu Met Pro
 100 105 110

<210> 40
 <211> 13
 <212> PRT
 <213> MOUSE

<400> 40

Arg Glu Ile Arg Arg Lys Leu Arg Glu Leu Gln Leu Arg
 1 5 10

<210> 41
 <211> 13
 <212> PRT
 <213> HUMAN

<400> 41

Arg Glu Ile Arg Arg Lys Leu Arg Glu Leu Gln Leu Arg
 1 5 10

<210> 42
 <211> 10
 <212> PRT
 <213> Rev

<400> 42

Leu Pro Pro Leu Glu Arg Leu Thr Leu Asp
 1 5 10

<210> 43
 <211> 12
 <212> PRT
 <213> MOUSE

<400> 43

Ala Leu Gln Lys Lys Leu Glu Glu Leu Glu Leu Asp
 1 5 10

<210> 44
 <211> 12
 <212> PRT
 <213> czyxin

<400> 44

Leu Thr Met Lys Glu Val Glu Glu Leu Glu Leu Leu
 1 5 10

<210> 45
 <211> 10
 <212> PRT
 <213> PKI-alpha

<400> 45

Leu Ala Leu Lys Leu Ala Gly Leu Asp Ile
 1 5 10